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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,392	03/05/2002	Ioannis Katsavounidis	INTV.012A	8446

7590 11/03/2004  
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EXAMINER

WONG, ALLEN C

ART UNIT PAPER NUMBER

2613

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/092,392

Applicant(s)

KATSAVOUNIDIS ET AL.

Examiner

Allen Wong

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 9/4/02.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 5-7, 11, 12, 15, 16, 18-20, 22 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Rhee (6,289,054).

Regarding claims 1, and 3, Rhee discloses a method of providing forward error correction (FEC) on a plurality of frame packets, the method comprising:

concatenating selected portions of packet data corresponding to a plurality of frame packets for a first frame (col.6, ln.10-23, note in fig.4, the adapter provides data to the transmitter 408 for concatenating selected packet data portions);

generating forward error correction bits for the concatenated selected portions of packet data (col.6, ln.10-19; FEC bits are generated for the concatenated selected packet data portions); and

transmitting the forward error correction bits in a separate packet identified with a user data identifier code (fig.4, element 408).

Regarding claims 2 and 16, Rhee discloses wherein the transmission of the forward error correction bits in the separate packet is MPEG-4 compliant (col.5, ln.19).

Regarding claims 5 and 18, Rhee discloses wherein the forward error correction bits are generated using a systematic code (col.6, ln.19-23).

Regarding claims 6 and 19, Rhee discloses wherein the selected portions of packet data includes motion vector data and DCT data (col.5, ln.18-20; MPEG encoding/decoding must utilize motion vector data and DCT data).

Regarding claims 7 and 20, Rhee discloses wherein the selected portions of packet data includes only header data, motion vector data and DCT data (col.5, ln.18-20; MPEG encoding/decoding must utilize header data, motion vector data and DCT data).

Regarding claims 11, 15 and 22, Rhee discloses an error correction generation circuit, comprising:

a first instruction stored in processor readable memory configured to generate forward error correction data for selected portions of packet data that are to be transmitted in a corresponding plurality of frame packets (col.6, ln.10-19; FEC bits are generated for the selected packet data portions);

a second instruction stored in processor readable memory configured to store the forward error correction data in a first packet separate from the plurality of frame packets (fig.4, element 408); and

a third instruction stored in processor readable memory configured to identify the first packet with a first data identifier code (col.6, ln.10-23; note element 414 can identify the first packet and determine the FEC correction if necessary).

Regarding claims 12 and 23, Rhee discloses further comprising a fourth instruction configured to concatenate selected portions of packet data before the first instruction generates the forward error correction data (col.6, ln.10-23, note in fig.4, the adapter provides data to the transmitter 408 for concatenating selected packet data portions).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 10, 17 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhee (6,289,054) in view of Lewis (6,601,209).

Regarding claims 4, 10, 17 and 24, Rhee does not specifically disclose wherein the forward error correction bits are generated using a BCH code. However, Lewis teaches the use of BCH code for error correction of data during transmission (col.3, ln.54-63). Therefore, it would have been obvious to one of ordinary skill in the art to

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combine the teachings of Rhee and Lewis, as a whole, for accurately, efficiently, reliably transmit compressed MPEG data while maintaining high quality of the transmitted video data (Lewis col.2, ln.38-41).

5. Claims 8, 9, 13 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rhee (6,289,054) in view of Tan (6,075,576).

Regarding claims 8-9, 13 and 21, Rhee does not specifically disclose further comprising: setting a flag indicating that a fixed Video Object Plane (VOP) increment is to be used; and providing a corresponding fixed time increment value. However, Tan teaches the use of VOP time increment data (see figs.3A, 3B and col.4, ln.44-67; note VOPs are disclosed and that clearly, VOPs are incremented accordingly in a similar sequential manner as I, P and B frames, where corresponding fixed offset exists to provide a fixed time increment value). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Rhee and Tan, as a whole, for accurately, efficiently coding and decoding video image data and coefficients, while maintaining high image quality when synchronizing VOPs of different rates (Tan col.2, ln.1-16).

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rhee (6,289,054) in view of Watanabe (6,084,888).

Regarding claim 14, Rhee discloses the use of MPEG-4 (col.5, ln.18-20). It is well known in the art that a packet must have a header extension code. However, if one is not convinced, Watanabe teaches the use of a Header Extension Code (HEC) in every packet in a first sequence of packets (fig.2, note header extension codes are

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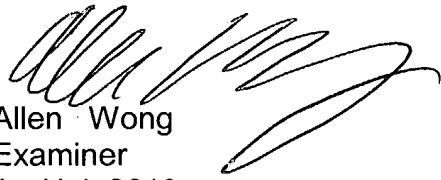
used). Therefore, it would have been obvious to one of ordinary skill in the art to apply the teachings of Rhee and Watanabe, as a whole, for improving the transmission efficiency of packetized data of coded data while accurately encoding the video data by reducing header data errors (Watanabe col.8, ln.57-63).

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (703) 306-5978. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (703) 305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Allen Wong  
Examiner  
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